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THE
DICTIONARY OF PAPER

A compendium of terms commonly used in
the U.S. Pulp, Paper and Allied Industries

FOURTH EDITION

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ABRASIVE PAPERS

ABRASIVE PAPERS. Relatively light to heavy chemical wood pulp or rope fiber papers, coated on one side with an abrasive material. In the coated abrasive industry basis weight is expressed in terms of the 24 × 36—480 ream. Fourdrinier sheets are generally used for hand and small mechanical sanders: kraft sheets in 50-60 pound weights for flint papers and in 67-70 pound weights for emery papers; alpha-cellulose sheets (40, 70, and 90 pounds) for garnet, aluminum oxide, and silicon carbide lines of hand sanding or light-duty machine sanding material. Where greater strength is desired lamination to lightweight cloth is resorted to, using fourdrinier kraft and cylinder rope sheets in 110-lb. weights for drum sander covers and in 130-lb. weights for belt, drum, disk or other mechanical sanding operations. Heavyweight materials are generally available with flint, garnet, aluminum oxide, and silicon carbide coatings. For wet sanding operations, fourdrinier papers in the 48 to 80 pound range are used. Such papers usually contain waterproofing additives and abrasive coatings consisting of aluminum oxide, silicon carbide or garnet particles. See *Emery paper, Finishing paper, Flint paper, Garnet paper, Glass paper, Pouncing paper, Tanning paper.*

ABSOLUTE HUMIDITY. The actual amount of water vapor present per unit volume of a gas. Because of the known relationship between absolute humidity and the pressure of water vapor in the air, it is often convenient to state the vapor pressure rather than the absolute humidity. See also *Relative humidity.*

ABSORBENCY. The property of a material that causes it to take up liquid with which it is in contact. Several measures of absorbency are: (a) the time required for the material to take up a specified volume of liquid; (b) the rate of rise of liquid along a vertical strip dipping into the liquid; (c) the area of a specimen wetted in a specified time: (d) the quantity of liquid taken up by a completely saturated specimen. The method of measurement selected depends on the specific use of the paper.

ABSORBENT PAPERS. Soft, loosely felted papers that readily absorb water solutions or liquid chemicals. They are not sized with water-repellent agents, but may be treated with materials that

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enhance their wet strength. They include blotting, filter, matrix, and toweling papers, and base papers for the manufacture of vegetable parchment, artificial leather, vulcanized fiber, and many other processed papers.

ABSORPTIVE CAPACITY. See *Absorbency.*

ACCOUNT BOOK PAPER. See *Ledger paper.*

ACID ALUM. See *Alum.*

ACID DYES. A class of aniline dyes, so named because they are in the form of the sodium salt of dye acids. As a class they have much greater solubility and less tinctorial value than basic dyes but are much faster to light; on mixed furnishes they give more even dyeings than basic or direct dyestuffs. They have no direct affinity for cellulose, being mordanted to the fiber in stock dyeing by the presence of size and alum. Acid dyes are also extensively used in surface coloring.

ACID-FREE PAPER. (1) A wrapping or protective paper for applications where paper acidity would be harmful to the material in contact with the paper. (See Anti-tarnish paper.) (2) A permanent record paper where the lack of acidity would prevent its premature deterioration.

ACID-INSOLUBLE ASH. See *Ash, Acid-Insoluble.*

ACIDITY. (1) In aqueous solution, the condition wherein the concentration of hydrogen ions exceeds that of hydroxyl ions. (2) In paper, the condition that results in an acid solution when the paper is treated or extracted with water. In testing paper for acidity, the specimen is extracted with water at a definite temperature, and the extract is tested to determine its pH value or is titrated to determine the total amount of acid present.

ACID-PROOF PAPER. An industrial or packaging type paper colored with dyes which do not discolor when exposed to acid compounds.

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FLAT NEWS. Newsprint cut into sheets.

FLAT PAPER. Paper which comes from the mill in flat sheets, without fold or crease. The term is applied especially to writing papers in packages of flat sheets of standard sizes and finishes.

FLAT REAM. A ream of paper which is shipped flat, i.e., not folded.

FLAT ROLLS. Rolls of paper that have been flattened through dropping or crushed by a pressure on the side of the roll.

FLATS. See *Flat writings*.

FLAT WALLET. See *Red wallet*.

FLAT WRAPPERS. A general term applied to wrapping paper which has been put up in bundles of flat sheets instead of folded.

FLAT WRITINGS. (1) Usually school flats and tablet paper. (2) Writing paper with a smooth, flat finish as distinguished from a bond finish.

FLAX. The bast fiber of the flax plant *(Linum usitatissimum)* has been the source of linen for several millennia. Linen rags, cuttings, threads, etc., have long been used in papermaking. More recently the straw from flax cultivated for seed has been used for the manufacture of cigarette paper and similar papers.

FLAX BOARD. A fibrous insulation board manufactured largely from flax straw pulp.

FLEXIBLE COVER. A cover paper designed to be flexible and used for book covers, pocketbooks, etc.

FLEXIBLE FIBRE. A grade of *Vulcanized fibre (q.v.)* made soft and resilient by incorporating a plasticizer to make it suitable for gaskets, packing, and similar nonelectrical applications. It is